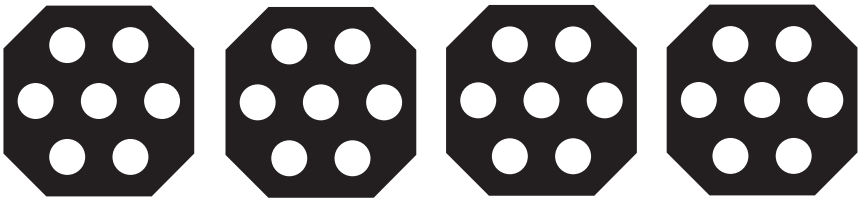
EQUINOX

www.prolight.co.uk



mightyBAR System

ORDER CODE: EQLED64

USER MANUAL

WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

CAUTION!

Keep this equipment away from rain, moisture and liquids.

SAFETY INSTRUCTIONS

Every person involved with the installation, operation & maintenance of this equipment should:

- Be competent
- Follow the instructions of this manual

CAUTION! TAKE CARE USING THIS EQUIPMENT!
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!

Before your initial start-up, please make sure that there is no damage caused during transportation. Should there be any, consult your dealer and do not use the equipment.

To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.

Please note that damages caused by user modifications to this equipment are not subject to warranty.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power-cable come into contact with other cables. Handle the power-cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Do not connect this equipment to a dimmer-pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available voltage is between 220v/240v.
- Make sure that the power-cable is never crimped or damaged. Check the equipment and the power-cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately. Have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- WARRANTY; One year from date of purchase.

OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void.

Incorrect operation may lead to danger e.g.: short-circuit, burns, electric shocks, lamp failure etc.

Do not endanger your own safety and the safety of others!
Incorrect installation or use can cause serious damage to people and property.

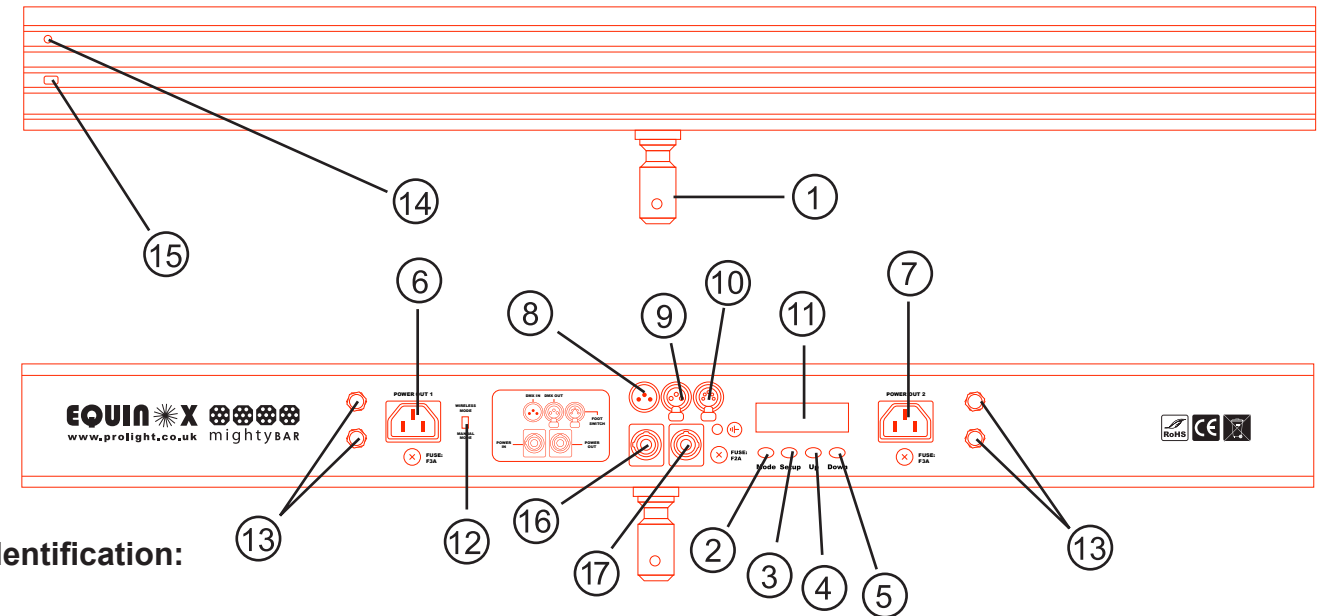
You should find inside the carton the following items:

1, Equinox Mighty Bar 2, Power cable 3, User manual

Technical Specifications:

28 x 8W Quad-colour LEDs
Beam angle: 25 degrees
0-100% dimming and variable strobe (via DMX)
DMX channels: 4, 6, 9, 16 and 19 selectable
Operating modes: 1, Sound activated
2, Built-in programmes
3, Auto Run
4, DMX
5, Slave
Infra-red operation (remote included)
14 built-in programmes
4 push button menu with LCD digital display
3-pin XLR In/Out sockets for DMX
5-pin socket for foot controller (MB-1)
Powercon in/out sockets
2 x IEC power out sockets (switchable for I.R remote)
Power consumption: 260W
Power supply: 240V
Dimensions: 1005 x 95 x 291mm
Weight: 9.7Kgs
Fuse: F2A

Overview



Identification:

1, 28mm spigot
2, Mode button
3, Setup button
4, Up button
5, Down button
6, IEC Power out 1
7, IEC Power out 2
8, DMX in
9, DMX out
10, 5-pin footswitch socket
11, LCD display
12, Wireless/manual mode switch
13, Output to lights
14, I.R LED
15, I.R sensor
16, Powercon in
17, Powercon out

Operation modes:

1, Sound active mode

To select the sound active mode, press the **"MODE"** button to show **"SOUND MODE"** in the LCD display window. Now press the **"SETUP"** button and use the **"UP"** and **"DOWN"** buttons to adjust the sound sensitivity level (SENS00-31) and press the **"SET UP"** button again to adjust the frequency level (FQN01-99). Finally press the **"SETUP"** button to confirm your setting.

2, Built-in programmes mode

To access the built-in programme mode, press the **"MODE"** button to show **"01.STATIC"** in the LCD display window. Now press the **"SETUP"** button and use the **"UP"** and **"DOWN"** buttons to choose one of the 14 built-in programmes (01-14) (see table overleaf).
To choose one of the seven colours in the **"STATIC"** mode, press the set **"SETUP"** button and use the **"UP"** and **"DOWN"** buttons to choose one of the following 15 colours.

To adjust the speed level in the remaining 13 built-in programmes, press the "**SETUP"** button and use the **"UP"** and **"DOWN"** buttons to set the desired speed level (00-99).
To adjust the flash speed press the **"SETUP"** button and use the **"UP"** and **"DOWN"** buttons to set the desired flash speed level (00-99). Finally press the **"SETUP"** button to confirm your setting.

3, Auto Run mode

To select the Auto run mode, press the **"MODE"** button to show **"AUTO RUN"** in the LCD display window. Now press the **"SET UP"** button to adjust the frequency level (FQN01-99). Finally press the **"SETUP"** button to confirm your setting. The unit will now run all 13 built-in programmes one after another.

4, DMX mode

To select the DMX mode, press the **"MODE"** button to show **"DMX MODE"** in the LCD display window. Press the **"SETUP"** button and use the **"UP"** and **"DOWN"** buttons to set a DMX address from 001-512. Now press the **"SETUP"** button again and use the **"UP"** and **"DOWN"** buttons to choose one of the 5 DMX channel settings (4, 6, 9, 16 or 19) Finally press the **"SETUP"** button to confirm your setting. (see DMX chart). The starting address for this fixture is 001.

5, Slave mode

To select Slave mode, first link the units together via 3-Pin XLR cable(s), press the **"MODE"** button to show **"SLAVE MODE"** on all of the slave units. Now the slave units will follow in conjunction with the master unit.

6, IEC socket power on/off mode

To turn the IEC Power Out 1 Socket on or off, press the **"MODE"** button to show **"LIGHT 1"** in the LCD display window. Now press the **"SETUP"** button to turn the IEC Power Out 1 Socket on or off. To turn the IEC Power Out 2 Socket on or off, press the **"MODE"** button to show **"LIGHT 2"** in the LCD display window. Now press the **"SETUP"** button to turn the IEC Power Out 2 Socket on or off.

NOTE: If the Mighty bar is being used in conjunction with the MB-1 foot controller any number of Mighty bars can be controlled via the foot controller by setting all bar systems into "SLAVE" mode.

NOTE: The frequency level (FQN01-99) adjusts how many times the programme repeats before moving to the next programme.

Built-in programme chart

Static Colour BLAC-RGBW Flash00-99	Red, Greeen, Blue, White, Yellow, Cyan, L/Blue, Pink, L/Green, Purple, White (RGB), L/Cyan, L/Yellow, L/Purple, White (RGBW)
Dream Speed00-99 Flash00-99	15 colour dreaming Speed & Flash adjustable
Meteor Speed00-99 Flash00-99	15 colour flow Speed & Flash adjustable
Fade Speed00-99 Flash00-99	15 colour fade Speed & Flash adjustable
Change Speed00-99 Flash00-99	15 colour change Speed & Flash adjustable
Flow 1 Speed00-99 Flash00-99	15 colour chase in 1 direction Speed & Flash adjustable
Flow 2 Speed00-99 Flash00-99	15 colour chase in 2 directions Speed & Flash adjustable
Flow 3 Speed00-99 Flash00-99	15 colour relay chase in 1 direction Speed & Flash adjustable
Flow 4 Speed00-99 Flash00-99	15 colour relay chase in 2 directions Speed & Flash adjustable
Flow 5 Speed00-99 Flash00-99	15 colour chase from sides to centre Speed & Flash adjustable
Flow 6 Speed00-99 Flash00-99	15 colour chase from centre to side Speed & Flash adjustable
Flow 7 Speed00-99 Flash00-99	15 colour chase Speed & Flash adjustable
Flow 8 Speed00-99 Flash00-99 1. BLAC-RGBW 2. BLAC-RGBW	2 colour chase in 1 direction Speed & Flash adjustable Same as static colour
Flow 9 Speed00-99 Flash00-99 1. BLAC-RGBW 2. BLAC-RGBW	2 colour chase in 2 directions Speed & Flash adjustable Same as static colour

4 channel DMX chart

CH 1	CH 2	CH 3	CH 4
Red 0-100%	Green 0-100%	Blue 0-100%	White 0-100%

6 channel DMX chart

CHANNEL	VALUE	FUNCTION
1	000-255	RED
2	000-255	GREEN
3	000-255	BLUE
4	000-255	White
5	000-255	MASTER DIMMER 0-100%
6	000	ON
	001-005	15 COLOUR SOUND ACTIVE
	006-010	ON
	011-255	STROBE (slow to fast)

9 channel DMX chart

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9
240-255 Sound	Sens 0-255							
232-239 Flow 9	Speed 0-255	Flash 0-255	15 colour select	15 colour select	Blue 0-255	White 0-255	IEC Power Out 1 On 128-255	IEC Power Out 2 On 128-255
224-231 Flow 8			15 colour select	15 colour select				
216-223 Flow 7			Red 0-255	Green 0-255				
208-215 Flow 6								
200-207 Flow 5								
192-199 Flow 4								
184-191 Flow 3								
176-183 Flow 2								
186-175 Flow 1								
160-167 Change								
152-159 Fade								
144-151 Meteor								
136-143 Dream								
128-135 RGBW	Master dimmer 0-255						IEC Power Out 1 Off 0-127	IEC Power Out 2 Off 0-127
120-127 RBW								
112-119 RGW								
104-111 GBW								
96-103 RGB								
88-95 RB								
80-87 GW								
72-79 WR								
64-71 BW								
56-63 GB								
48-55 RG								
40-47 W								
32-39 B								
24-31 G								
16-23 R								
0-15 Colour mix (CH4, 5, 6 & 7)								

16 channel DMX chart

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12
R1	G1	B1	W1	R2	G2	B2	W2	R3	G3	B3	W3

CH13	CH14	CH15	CH16
R4	G4	B4	W4

19 channel DMX chart

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12
0-15	Master dimmer	Flash	R1	G1	B1	W1	R2	G2	B2	W2	R3

CH13	CH14	CH15	CH16	CH17	CH18	CH19
G3	B3	W3	R4	G4	B4	W4

I.R. remote function

To control the Mighty Bar via the I.R remote, first please make sure that the mighty bar has been switched into wireless mode. To switch it into wireless mode simply the set the “WIRELESS/MANUAL” switch to wireless. To return back to the manual mode, switch the “WIRELESS/MANUAL” switch back to manual.

Functions:

“BL” button: Use this button to turn the unit on and off.
“SP” button: Use this button to increase or decrease the speed of the programme
(Press 1 for slow, 2 for medium, 3 for fast and 4 for off)
“☼“ button: Use this button to increase or decrease the brightness of the LEDs
(Press 1 for 50%, 2 for 75%, 3 for 100% and 4 for off)
“FL” button: Use this button to add strobe to any of the shows.
(Press 1 for slow, 2 for medium, 3 for fast and 4 for off)
“RGBW” buttons: Use these buttons to increase or decrease the brightness of each individual colour.
(Press 1 for 50%, 2 for 75%, 3 for 100% and 4 for off)
“PR” buttons: Use these buttons to select one the built-in colour change programmes.
“D” buttons: Use these buttons to select one the built-in colour fade programmes.
“SA” buttons: Use the buttons to select one of the sound active programmes.
“ON1/OFF1” button: Use this button to power up and power down the Power out 1 socket.
“ON2/OFF2” button: Use this button to power up and power down the Power out 2 socket.

Note: When multiple fixtures are being linked, the slave units must be set into slave mode via the LCD display the Mighty bar(s).

DMX Control Mode
Operating in a DMX control mode environment gives the user the greatest flexibility when it comes to customising or creating a show. In this mode you will be able to control each individual trait of the fixture and each fixture independently.

Setting the DMX address
The DMX mode enables the use of a universal DMX controller. Each fixture requires a "start address" from 1- 511. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 7 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100,101,102,103,104,105 and 106. Choose a start address so that the channels used do not overlap. E.g. the next unit in the chain starts at 107.

DMX-512:
• DMX (Digital Multiplex) is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions form the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a data "out" terminal).

DMX Linking:
• DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned to a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

DATA Cable (DMX cable) requirements (for DMX operation):
• The Equinox Mighty Bar can be controlled via DMX-512 protocol. The DMX address is set on the back of the unit. Your unit and your DMX controller require a standard 3-pin XLR connector for data input/output (figure 1).

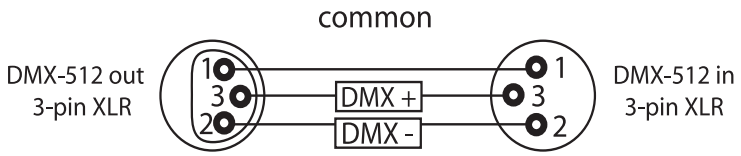
Figure 1

Further DMX cables can be purchased from all good sound and lighting suppliers or Prolight dealers.
Please quote:
CABL10 – 2M
CABL11 – 5M
CABL12 – 10M

Also remember that DMX cable must be daisy chained and cannot be split.

Notice:

• Be sure to follow figures 2 & 3 when making your own cables. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behaviour.



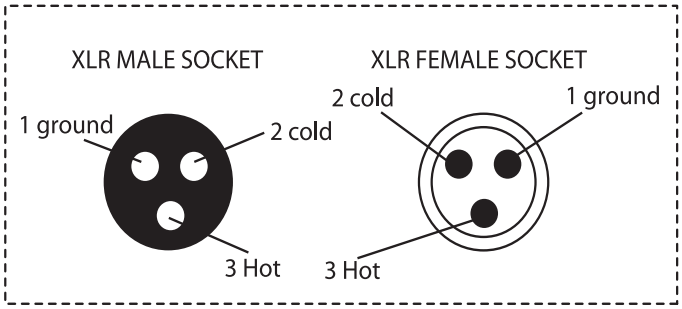


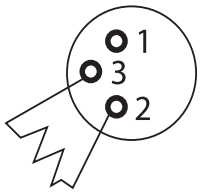
FIGURE 3

XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Negative
Pin 3 = Postive

FIGURE 2

Special Note: Line termination:

• When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.

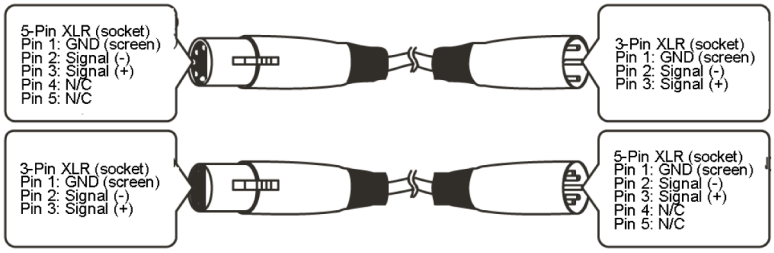


Termination reduces signal transmission problems and interferance. it is always advisable to connect a DMX terminal, (resistance 120 Ohm 1/4 W) between pin 2 (DMX-) and pin 3 (DMX+) of the last fixture.

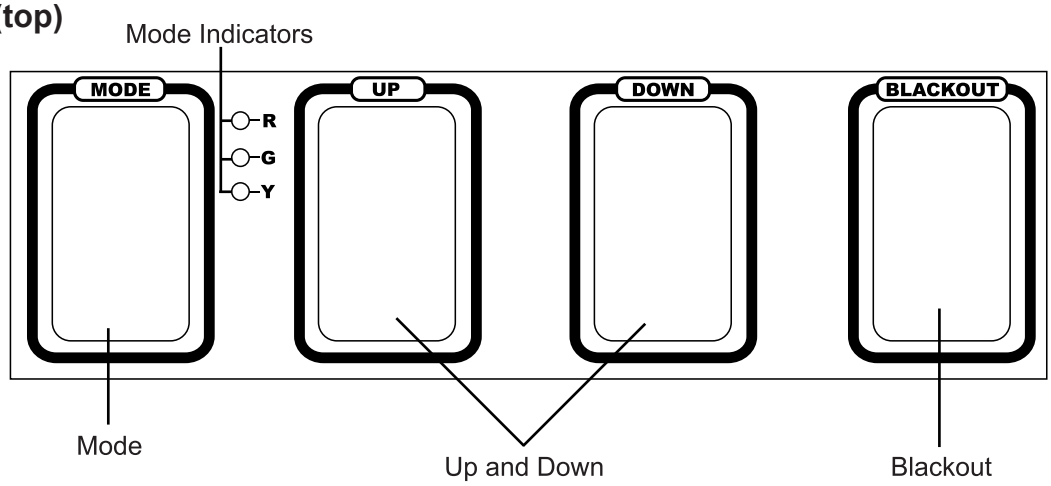
Using a cable terminator (part number CABL90) will decrease the possibilities of erratic behaviour.

5-Pin XLR DMX Connectors:

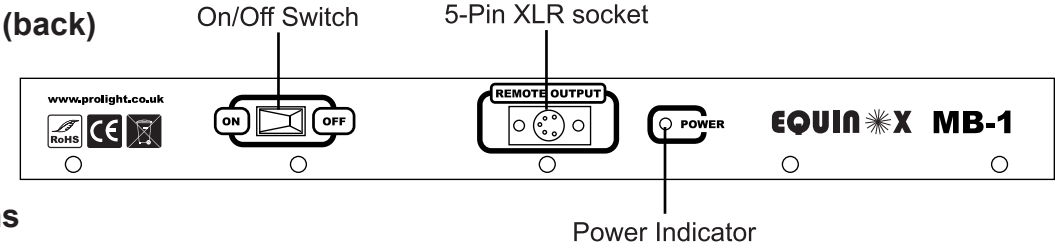
• Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-Pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The Chart below details the correct cable conversion.



Overview (top)



Overview (back)



Operations

This foot controller is made specially for the Mighty Bar system. Many of the built-in programmes can be accessed via the 4 foot switches. To control the Mighty Bar using the foot switch controller, you must first set the bar systems into **"SLAVE"** mode.

Static colour selection mode:
To activate this mode, press the **"MODE"** foot switch so the **"R"** LED indicator is lit, now use the **"UP"** and **"DOWN"** foot switches to select the desired colour. To blackout the unit, press the **"BLACKOUT"** foot switch and press it again to return it to the previous setting.

Sound active mode:
To activate this mode, press the **"MODE"** foot switch so the **"G"** LED indicator is lit, now the unit will work to the music. If you require to blackout the unit at any point, press the **"BLACKOUT"** foot switch and press it again to return it to the previous setting.

Note: To activate the IEC Power Out 1 & 2 sockets on the Mighty Bar via the footswitch controller while it is in the Sound active mode, press the **"UP"** pedal to turn the **"IEC Power Out 1"** socket on and press it again to turn it off. To turn the **"IEC Power Out 2"** socket on, press the **"DOWN"** pedal and press again to turn it off.

Note: The IEC Power Out 1 & 2 sockets can only be operated in this mode via the footswitch.

Built-in programmes:
To activate this mode, press the **"MODE"** foot switch so the **"Y"** LED indicator is lit, now use the **"UP"** and **"DOWN"** foot switches to select the desired built-in programme. To blackout the unit, press the **"BLACKOUT"** foot switch and press it again to return it to the previous setting.

Full on mode:
To set the unit to Full On you can press and hold down for 3 seconds any of the four foot switches, this will give Full ON **"WHITE"**. To return to the previous setting press the **"MODE"** foot switch. When Full On is activated you can still use the **"BLACKOUT"** foot switch.

Notes: